# THE ANTENATAL TREATMENT OF VENEREAL DISEASE—GONORRHŒA\*

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I ACCEPTED the invitation to read this paper with considerable diffidence because during the last few years it has not been my custom to treat patients with gonorrhœa. At the London Hospital the female venereal clinic is under the charge of the genito-urinary and not of the gynæcological department. Moreover, there have already been two papers on this subject before your Society, and these papers and the discussion which followed them must surely have covered all there is to be said at the present day about this comparatively small subject. But I was asked to give some broad impressions gained in the ordinary course of obstetrical practice. You must not expect therefore to hear from me anything new or instructive about the treatment of gonorrhea during pregnancy; all I hope to do is perhaps to make a few points which may merit discussion.

The first point which has impressed itself on me is the rarity of gonorrhœa complicating pregnancy or the puerperium, as seen in my routine experience in hospital work or in private practice. For example, at the City of London Maternity Hospital in the five years 1922–1927 inclusive (during which there were about 10,000 confinements in the hospital) I can find notes of only eight cases of gonorrhea. Three of these were found in the ante-natal department and were sent to the Thavies Inn Clinic for treatment and delivery. The other five were discovered in the labour room or lying-in-ward, and three of the infants got ophthalmia. These were the only cases of severe ophthalmia which occurred in the hospital during this period. The prophylactic instillation of silver nitrate into the eyes is used as a routine for all the infants

<sup>\*</sup> Based on an address delivered before the Medical Society for the Study of Venereal Diseases on March 30th, 1928.

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born in the hospital; but, nevertheless, the occurrence of only three cases of gonorrheal ophthalmia in 10,000 deliveries is a clear indication that gonorrhea is a rare disease amongst the mothers delivered in this hospital.

I have obtained the following figures from our records

at the London Hospital:—

I. Ophthalmia neonatorum.

T 1 C C 1 T			Year.	
Number of cases of la	boui	::	1926.	1927.
			2,265	1,982
			1,982	
Total	•	•	4,247	
Number of cases of o	phth	al-		
mia neonatorum	prov	$\operatorname{ed}$		•
bacteriologically as	gor	10-		
coccal:	O			
			2	2
Tota	al :	=	4	

II. Gonococcal Puerperal Septicæmia.

One case in the whole of the hospital records from 1906.

III. Gonorrhæa and Pregnancy.

During the period from 1922 to date ninety-nine pregnant women were examined in the venereal clinic who were suffering from vaginal discharge. On bacteriological examination for the gonococcus it was found to be present in 28, absent in 71.

These cases were drawn not only from our own obstetrical department (13,000 deliveries), but also include many cases sent up by general practitioners because of

discharge.

#### DIAGNOSIS OF GONORRHŒA

The second point I wish to discuss is the diagnosis of gonorrhœa during pregnancy. There is too much tendency to loose and easy diagnosis of the disease. This is not confined only to midwives and to doctors without special training in venereal work. The majority of midwives will regard every woman with an excess of vaginal discharge during pregnancy as a case of gonorrhœa.

This is a fault on the right side, for it prompts them to send all such patients to doctor or to a hospital clinic. But even amongst trained medical people I notice in certain quarters a tendency to make the diagnosis of gonorrhea on clinical signs and symptoms alone and in the absence of the demonstration of the gonococcus. I ask this question, therefore: is a coincident clinical infection of the urethra, Bartholin's gland and the cervix, together with the presence of "macules" about the orifices of the urethral and Bartholin ducts, sufficiently significant to warrant a diagnosis? Personally I hold very emphatically that the diagnosis is unwarrantable, unless the gonococcus can be demonstrated by an adequate technique, in the secretion from the urethral or cervical canals, or from Bartholin's gland. Again—and I think this is a wellappreciated point of technique—the absence of gonococci in films only is not sufficient to exclude the disease. But if the gonococcus fails to grow in culture, especially on repeated attempts, on suitable media (such as bloodagar), the disease can be excluded. I expect the precaution is always taken, in making a culture, to have the culture tube at the proper temperature and to place it at once in the incubator, or otherwise to keep it at the proper temperature without giving it a chance to cool. These precautions are essential for success, because the gonococcus is very sensitive to a cool temperature.

There is another clinical error associated with gonorrhæa, especially with gonorrhæa during pregnancy, which is still widely prevalent, namely, the significance of the presence of so-called "venereal warts" or "condylomata acuminata." The presence of these in a pregnant woman is as a rule accepted as sufficient evidence of gonorrhæa without further investigation. I expect most experts will agree that these are found more often in nongonorrhæal than in gonorrhæal cases; and that, although they are most often found associated with uncleanliness, it is possible for them to occur without any apparent cause.

There is another point in connection with diagnosis which is of the utmost importance. It is that many cases of gonorrhœa in pregnancy, perhaps the majority, are certain to be overlooked because they give few or no signs or symptoms. A great many pregnant women have a vaginal discharge which is nothing more than an excess of the normal cervical and vaginal secretions.

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Cases of gonorrhæa, therefore, in which the symptoms are slight are easily overlooked in the ordinary routine of ante-natal and other obstetrical practice. Doctors, furthermore, are not on the qui vive for gonorrhæa in their pregnant patients, because it is to them a rare disease in these circumstances. To the venereal expert gonorrhæa is a common disease, because he deals with little else, and he is apt to overlook the fact that he is in reality dealing only with a tiny fraction of the population. The only way to detect every case would be to take urethral and cervical cultures from all pregnant women. Such a proposition would in my opinion be ludicrous; just as unpractical as the proposition to make pregnancy a notifiable condition in order that every woman might have a routine Wassermann test performed.

As a teacher of obstetrics, I admit to making the mistake of teaching students to recognise the signs and symptoms only of the fully-developed disease, and of not teaching them to recognise and investigate the merely

suspicious cases.

The Necessity for Treatment and Cure before the Termination of Pregnancy.—Gonorrhœa during pregnancy may be said to be more favourable than gonorrhea in the nonpregnant state, in the sense that so long as pregnancy continues the Fallopian tubes are protected by the intervention of the ovum between the tubes and the infected cervix. But the termination of pregnancy results almost invariably in spread of the infection up-The condition of the uterus post partum seems to be peculiarly favourable to infection. It is therefore of the utmost importance to diagnose and treat gonorrhea during pregnancy and to cure it before pregnancy is terminated. Two questions I would like to ask the experts is this: Is gonorrhœa a more severe disease in pregnancy than in the non-pregnant state? And, is gonorrhœa more resistant to treatment during pregnancy than in the non-pregnant state?

Principles of Treatment.—This is, above all, the part of the subject with which I do not feel competent to deal. The very fact that I see so little gonorrhea in my maternity wards sufficiently testifies to the fact that gonorrhea during pregnancy is being daily cured by the members of the staffs of venereal clinics. For example, at the London Hospital, Mr. F. Kidd and Dr. M. Simpson

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treated twenty-one cases and cured them all, and abortion occurred in one case only.

#### **TREATMENT**

The treatment during pregnancy of an infected urethra in Bartholin's gland presents no particular problem. The chief problem is the treatment of an infected cervix. Treatment by vigorous swabbing of the cervical canal was for a long time refrained from because of the risk of causing abortion. I believe this fear is groundless and that with reasonable care the risk of causing abortion is negligible.